

Appl No. 10/064,601
Amdt. dated July 12, 2006
Reply to Office action of April 24, 2006

Amendments to the Claims:

Claim 1-12 (cancelled)

5 Claim 13 (currently amended): The method of ~~claim 12~~ claim 20 further comprising:
detecting when a rotation speed of a spindle of the optical disk drive changes; and
generating the DPLL signal based on the second control signal when the rotation
speed of the spindle of the optical disk drive changes.

10 Claim 14 (currently amended): The method of ~~claim 12~~ claim 20 further comprising
frequency dividing a frequency of the DPLL signal.

Claim 15 (currently amended): The method of ~~claim 12~~ claim 20 further comprising
setting charge pump currents of a frequency detector and a phase detector
15 according to the target frequency.

Claim 16-19 (cancelled)

Claim 20 (previously presented): A method for controlling an optical disk drive, the
20 method comprising:
monitoring a data phase-locked loop (DPLL) signal;
generating a first control signal based on an eight-to-fourteen modulation (EFM)
signal and the DPLL signal;
generating the DPLL signal based on the first control signal when the optical disk
25 drive is in a non-seek mode;
referencing track number information to calculate a target frequency of the DPLL
signal for a target track when the optical disk drive is in a seek mode for track
seeking;

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generating a second control signal based on the target frequency; and
generating the DPLL signal based on the second control signal.

5 Claim 21 (previously presented): A method for controlling an optical disk drive, the
method comprising:
monitoring a data phase-locked loop (DPLL) signal;
generating a first control signal based on an eight-to-fourteen modulation (EFM)
signal and the DPLL signal;
10 generating the DPLL signal based on the first control signal when the optical disk
drive is in a non-seek mode;
detecting when a rotation speed of a spindle of the optical disk drive changes;
referencing track number information to calculate a target frequency of the DPLL
signal for a target track when the rotation speed of the spindle changes;
15 generating a second control signal based on the target frequency; and
generating the DPLL signal based on the second control signal.

Claim 22 (new): The method of claim 21 further comprising frequency dividing a
frequency of the DPLL signal.

20 Claim 23 (new): The method of claim 21 further comprising setting charge pump currents
of a frequency detector and a phase detector according to the target frequency.